

Correlation between the Stuttering Severity and the Pragmatic Development in the Egyptian Children Who Stutter

Thesis

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

سببنا أنك لا تعلم لنا
إلا ما علمتنا أنك أنت
العليم العظيم

صدقة الله العظيم

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List of Abbreviations

<i>Abbreviation</i>	Meaning
<i>APA</i>	Auditory Perceptual Assessment
<i>ASSI</i>	Stuttering Severity Instrument for Children and Adult-Arabic Version
<i>AVD</i>	Avoidance
<i>AWS</i>	Adult who stutter
<i>BLDs</i>	Bloodstein classification
<i>CALMS</i>	Cognitive, affective, linguistic, motor, social model of stuttering
<i>CCCI,2</i>	Children communication checklist version 1,2
<i>CWNS</i>	Children who do not stutter
<i>CWS</i>	Children who stutter
<i>EAPLT</i>	Egyptian Arabic Pragmatic Language Test
<i>FDOPA</i>	Florodopa
<i>IPDs</i>	Intraphonemic disruption
<i>IQ</i>	Intelligence quotient
<i>LD</i>	Learning disable
<i>LOC</i>	Locus of Control
<i>MEG</i>	Magnetoencephalography

<i>MLU</i>	Mean length of utterance
<i>MLUm</i>	Mean length of utterance in morphemes
<i>MLUs</i>	Mean length of utterance in syllables
<i>MLUw</i>	Mean length of utterance in word
<i>MRI</i>	Magnetic resonance imaging
<i>OASES</i>	Overall Assessment of the Speakers Experience of Stuttering
<i>PET</i>	Positron emission tomography
<i>PLD</i>	Pragmatic language disorder
<i>SEV</i>	Severity
<i>SPI</i>	Stuttering prediction instrument
<i>SSI-3</i>	Stuttering Severity Instrument for children and adults
<i>TOPL1,2</i>	Test of pragmatic language version 1,2
<i>TTR</i>	Type-Token Ratio

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Introduction

Speech is considered the most distinguishing and complex motor activity that humans engage in, that requires smooth coordination of processes related to respiration, phonation, and articulation. Syllable production, in particular, involves rapid and precisely controlled transitions between open and closed configurations of the vocal tract **(Brown et al., 2005)**.

Fluency is the aspect of speech production that refers to continuity, smoothness, rate, and effort. Stuttering, the most common fluency disorder, is a disruption in the forward flow of speech that may take many forms (repetitions, prolongations, blocks, interjections) and may be accompanied by secondary behaviors, physical tension, negative reactions, increased avoidance, or decreased overall communication **(Coleman, 2013)**.

Fluency disorders are characterized by deviations in continuity, rhythm, smoothness, or effort in speech. A person with a fluency disorder may hesitate, repeat words, or prolong certain sounds, syllables, words, or phrases. Stuttering is the most common fluency disorder **(Lanier, 2010)**.

Stuttering is one of the most common developmental disorders that affects approximately one to two percent of the population at a given time (**Gilman, 2012**). Stuttering is most common in children, and usually begins in early childhood between two and five years of age (**Howell et al., 2008**).

The relation between stuttering and language is especially intuitive in young children. Several scholars have noted that stuttering onset, typically between ages 2 and 4, coincides with the critical period of accelerated expansion in children's expressive and receptive language (**Ratner, 1997**).

The possible stuttering-language link has become a focus of scientific interest. Investigators have focused their studies on five distinct linguistic variables: (a) phonological aspects, (b) loci of stuttering, (c) language complexity, (d) pragmatics (child's use of language), and (e) pragmatic skills. For example, research concerned with the variable listed above has provided evidence that stuttering is increased as a function of language complexity (**Logan and Conture, 1995; Zackheim and Conture, 2003**).

A simple but functional definition of pragmatic is that it is the language use. **Muma (1978)** defined also

pragmatics as the set of sociolinguistic rules one knows and uses in determining who says what to whom, how, why, when, and in what situation.

Swiney (2007) indicated by his clinical observations of children and young adults who stutter, that these young speakers often have situational speaking fears associated with their fluency disorder. What was not expected, however, is the frequency that these same speakers exhibit pragmatic weakness as well. This coincides with reports by **Blood and Seider (1981)** that indicate that 68% of the children who stutter (CWS) have at least one concomitant disorder.

Therefore, pragmatics have bi-directional role with CWS. These children often exhibit pragmatic language disorders (PLD) that either influence or complicate their speaking fears. The demands and capacities model, as explained by **Starkweather (1987)**, indicates that a decrease in fluency can occur when speech demands exceed a child's motor, linguistic and/or emotional capacities. Under this model, it is easy to understand how the linguistic and cognitive demands of dealing with the spontaneity of pragmatics, the most complex of language tasks, can increase dysfluency in CWS (**Swiney, 2007**).